

Circular economy and (agriculture) food system

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Azienda agricola biodinamica Le Due Torri



Global Eco – Inno Eco, circular economy in the countryside, 2nd April 2019

Some empirical evidence



PANIS CUM CARNE

1. Analysis of Soils by means of Pfeiffer's Circular Chromatography Test (PCC)

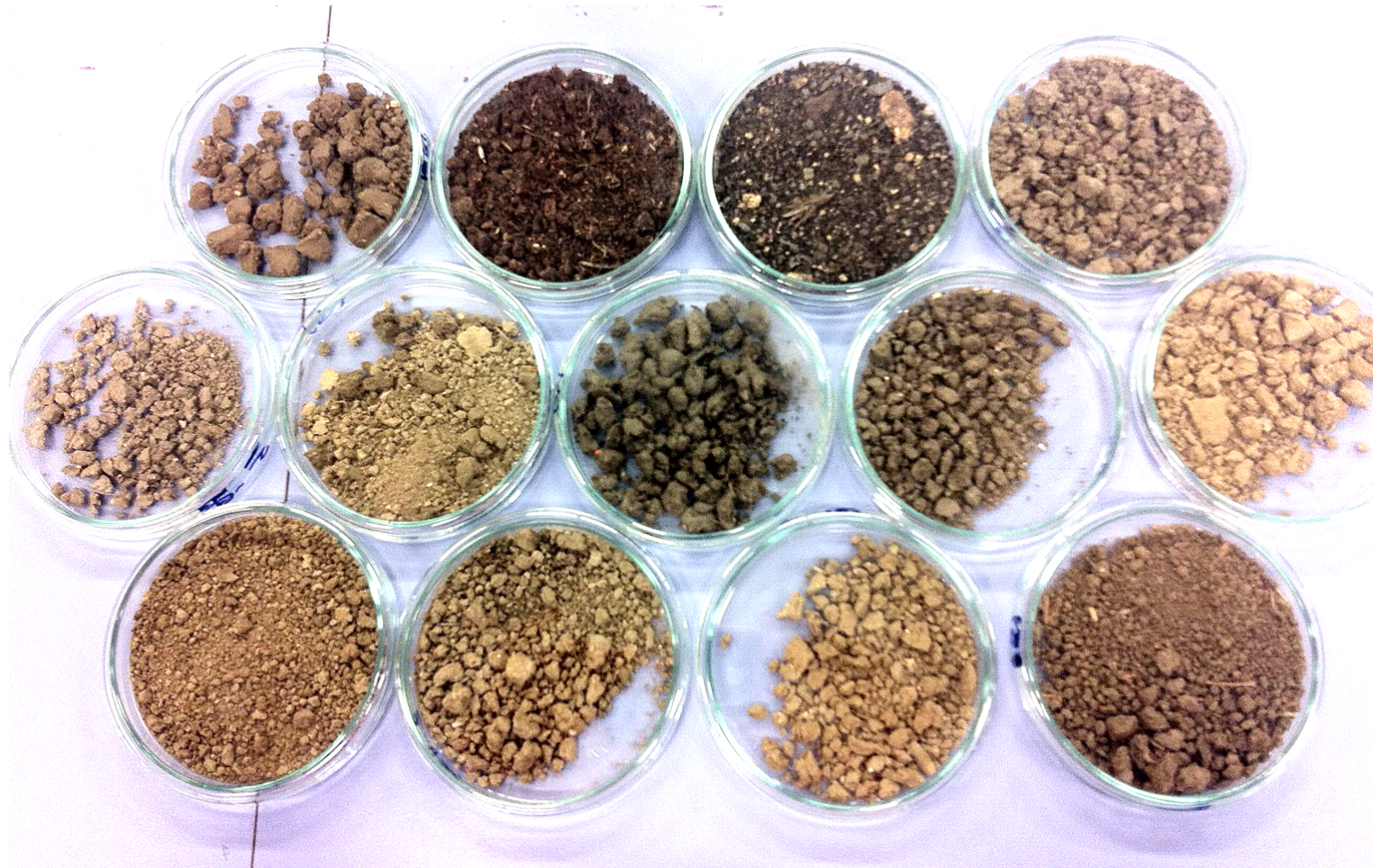
2. Willingness to pay from a discrete choice experiment when dealing with sustainable food products



Analysis of Soils by means of Pfeiffer's Circular Chromatography Test (PCC)



PANIS CUM CARNE



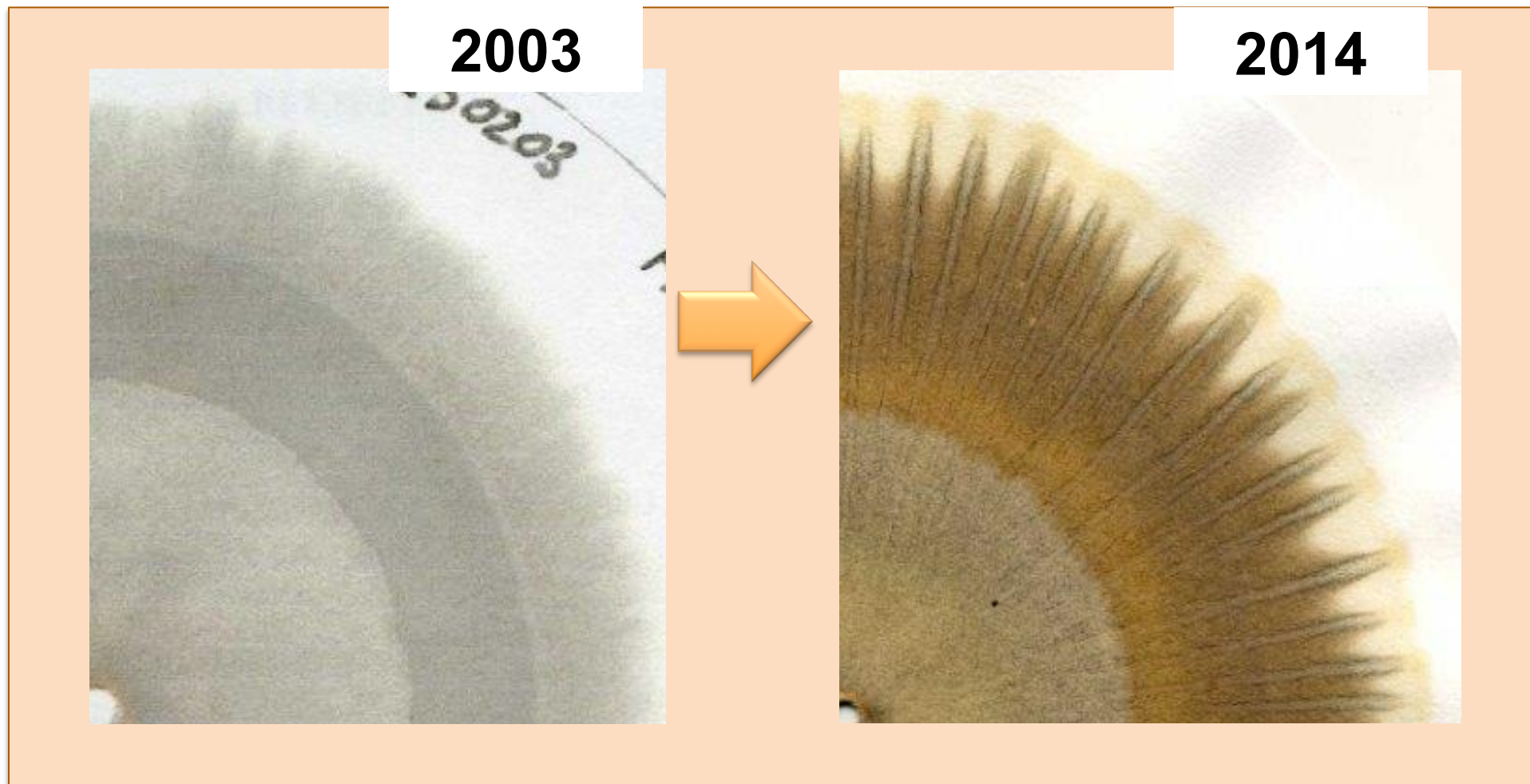
Soil samples of farm “Le Due Torri”





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Cultivated Soil's vitality evolutions
Years: 2003 – 2014
CONVENZIONAL / BIODYNAMIC

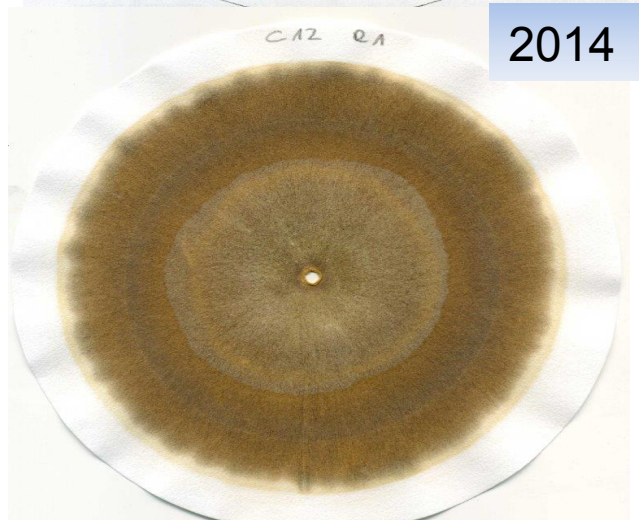
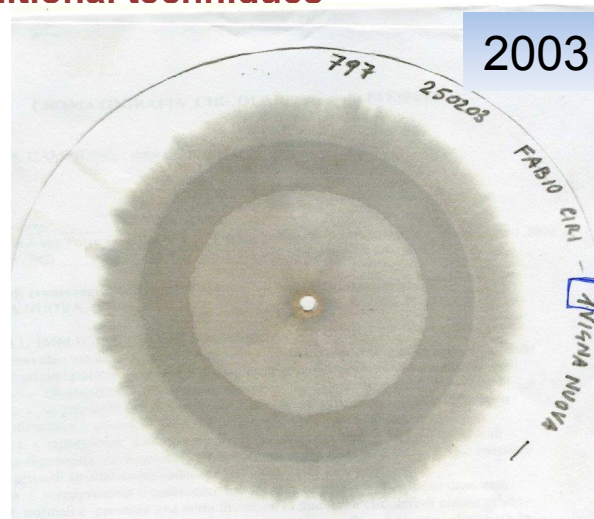
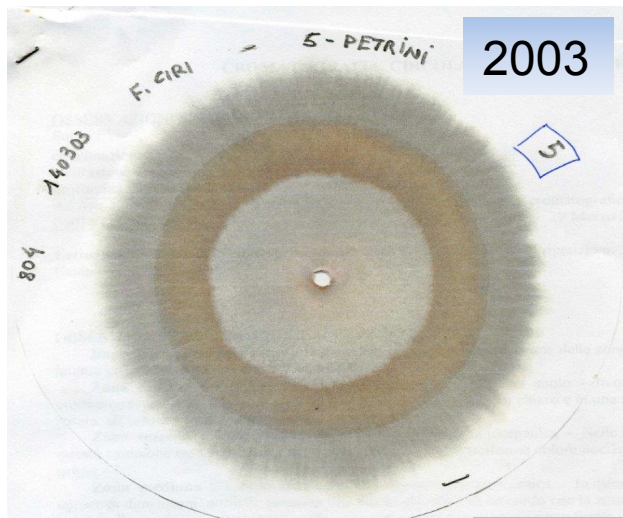


Analysis of Soils by means of Pfeiffer's Circular Chromatography Test (PCC)

2003 - Land cultivated with traditional techniques



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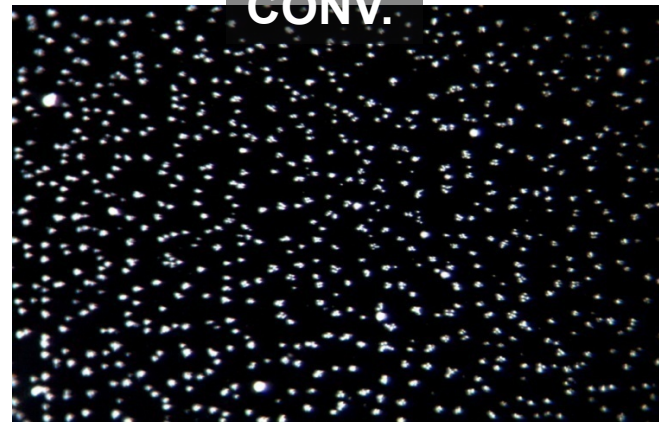
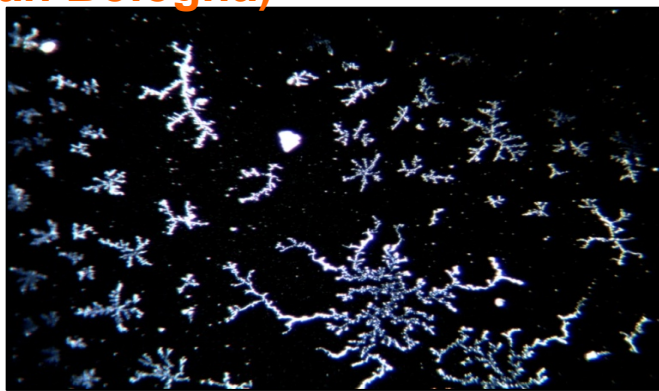
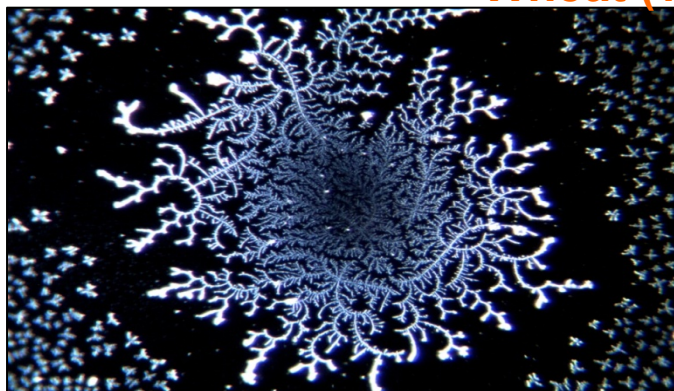
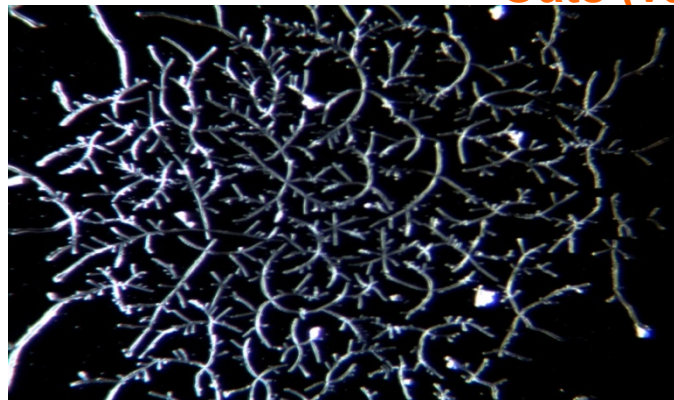
- More humus
- Increased microbial activity
- Channels are present starting from the middle zone
- Tips are extensive and obvious

Land always cultivated with traditional techniques Land cultivated in biodynamic in the last 7 years



**D.E.M. (Drops Evaporation Method)
applied to different seeds at
« Le Due Torri»**



BIO DIN**CONV.****Wheat (var. Bologna)****Oats (var. Luna)****Rye (var. Schlagler)****BIO DIN****CONV.****Wheat***LCFD (local connected fractal dimension)*

0,84 (a)

0,50 (b)

GERMINABILITY

99,3%

86,0%

Oats*LCFD*

0,96 (a)

0,88 (a)

GERMINABILITY

97,8%

72%

Rye*LCFD*

1,08 (a)

0,61 (b)

GERMINABILITY

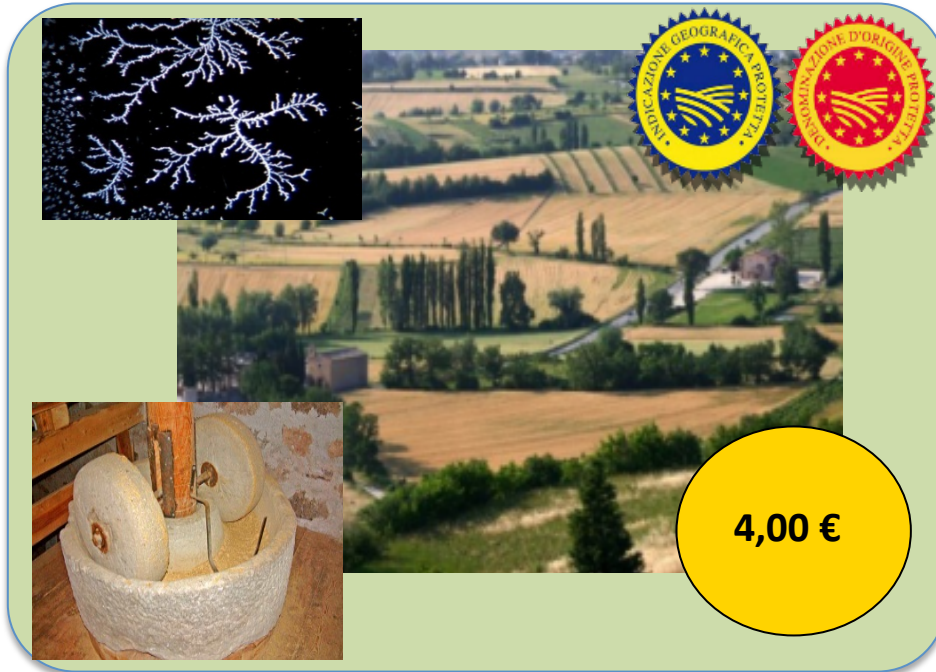
98,3%

92%

Willingness to pay from a discrete choice experiment when dealing with sustainable food products



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Willingness to pay for 1 kg of sustainable bread



Willingness to pay for 1 kg of poorly sustainable bread

